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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/467,965	12/21/1999	JEA YONG YOO	2950-0149P	3040

7590 04/07/2004

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EXAMINER	
CHIEU, PO LIN	
ART UNIT	**PAPER NUMBER**
2615	10

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/467,965	YOO ET AL.	
	Examiner	Art Unit	
	Polin Chieu	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 February 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 December 1999* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 2/6/04 have been fully considered but they are not persuasive. The Applicant alleges that the offset data of Saeki et al is used to adjust for overlapping reproduction points (page 17 of Applicant's arguments); thereby, the predetermined units are not a predetermined length. The examiner is not suggesting that the length of VOBU is predetermined. The examiner is suggesting that the time length of time map is predetermined. Time map information shows the relationship between the reproduction points and the storage positions of the VOBUs (col. 9, lines 31-36); the storage positions being arranged in order and corresponding to reproduction points that differ by a predetermined time unit (col. 9, lines 41-49); a time unit shows a predetermined time period set between the time maps, and a time offset shows a time difference between the start time of the current VOB and the time of the first time map (col. 10, lines 30-36); the time map specifies a VOBU map corresponding to a time that is obtained by adding the time offset to the start time of the current VOB (col. 10, lines 37-47). The time offset will be non zero, when the first part of a VOB is deleted by editing (col. 10, lines 48-52). Even if a non zero offset is assumed the separation between time maps is still a predetermined time unit (fig. 13).

Drawings

2. The drawings were received on 12/21/99. These drawings are accepted.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-10, 14-17, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Saeki et al (6,078,727).

Regarding claim 1, Saeki et al discloses recording a received digital data stream by grouping the received digital data stream into stream object units, with each stream object unit having a predetermined length (fig. 7; VOBs are considered to be stream objects because the data in the VOBs is used to create an MPEG stream); creating and recording time information for each stream object unit, the time information being used to search for the stream object units (fig. 11, col. 17, line 45 – col. 18, line 30); and creating and recording index information for pointing to the location of the time information for each stream object as management information for stream objects, each stream object consisting of a predetermined number of stream object units (fig. 9).

Regarding claim 2, Saeki et al discloses that the time information is the length of each stream object unit, expressed in terms of a count value counted at a constant interval (col. 9, line 42 – col. 10, line 52).

Regarding claims 3 and 7, Saeki et al discloses that the count value is a number incremented by 1 every the constant interval (fig. 9). For example, each time map is separated according to the TMU or the constant interval, and it is clearly shown that the time map numbers are incremented by 1.

Regarding claims 4 and 8, Saeki et al discloses that the index information is the order on the time information of a time information entry related to each stream object (fig. 9, col. 17, line 57 – col. 19, line 5).

Regarding claims 5 and 9, Saeki et al discloses that the index information is the order on the time information of a time information entry corresponding to a first stream object unit of each stream object (fig. 9).

Regarding claim 6, Saeki et al discloses recording time information on the count value counted at a constant interval (TMU) for each stream object unit (fig. 9), with each stream object unit consisting of transport streams (because the VOBs contain data used to produce a MPEG stream, which can be transported, the data is considered to be transport streams); and recording index information for pointing to the location on the time information for the start position of each stream object, each stream object consisting of one or more stream objects (fig. 9).

Regarding claim 10, Saeki et al discloses reading search time information for stream object units (fig. 9), each stream object unit consisting of a plurality of digital transport streams (fig. 10) and the search time information being the length of each stream object unit, expressed in terms of a count value counted at a constant interval (col. 9, line 42 – col. 10, line 52); detecting a stream object containing a requested

search time by comparing a requested search time with start time information of each stream object consisting of a predetermined number of stream objects, the start time information having been recorded for accessing the stream objects (col. 19, lines 30-38); reading index information pointing to location on the search time information for a start position of the detected stream object (fig. 9); and accessing a time information entry corresponding to the read index information (fig. 9).

The limitations of claim 14 were discussed in the art rejection of claim 8. Please refer to the art rejection of claim 8.

Regarding claim 15, Saeki et al discloses a recording means (fig. 15) for recording a received digital data stream by grouping the received digital data stream into stream object units (fig. 7) and for creating and recording time information for each stream object unit for searching for the recorded stream object units (fig. 9), with each stream object unit having a predetermined length (col. 9, line 42 – col. 10, line 52); and control means for creating index information for pointing to the location on the time information for each stream object (fig. 9) and controlling the recording means to record the index information, each stream object consisting of one or more stream object units (col. 17, line 28 – col. 19, line 49).

The limitations of claim 16 were discussed in the art rejection of claim 2. Please refer to the art rejection of claim 2.

The limitations of claim 17 were discussed in the art rejection of claim 8. Please refer to the art rejection of claim 8.

Regarding claim 19, Saeki et al discloses a data formatter (2, fig. 15) to group a received digital data stream into stream object units (fig. 7) and to create time information for each stream object unit for searching the stream object units individually (fig. 9), wherein each stream object unit has a predetermined length (col. 9, line 42 – col. 10, line 52); a data recorder to record the digital data stream grouped by and the time information created by the data formatter (fig. 15); and a controller to create index information for pointing to the location on time information created by the data formatter as management information for the stream object and to control the data recorder to record the created index information (figs. 11-13); wherein each stream object consist of one or more stream object units (fig. 10).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 11-13, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saeki et al in view of Moriyama et al (6,006,004).

Regarding claims 11-13, Saeki et al does not disclose accumulating search time from the accessed time information entry to a time information entry corresponding to the stream object unit containing the requested search time; comparing the accumulated search time with the requested search time and determines the position

corresponding to the requested search time based on the comparison result; and reproducing the recorded digital data stream from the determined position.

Moriyama et al teaches comparing time elapsed information with the requested search time and determines the position corresponding to the requested search time based on the comparison result; and reproducing the recorded digital data stream from the determined position (col. 27, line 20 – col. 28, line 42). The time elapse information of Moriyama et al represents the elapsed time. To obtain equivalent information using the time map tables of Saeki et al time must accumulated from the accessed time information entry to a time entry corresponding to the requested search time because the time map tables do not indicate elapsed time.

It would have been highly desirable to accumulate search time; compare the time to the requested search time; and reproduce from the determined position so that the user can perform a time search operation, thereby allowing a user to jump to specific times in the video data.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to perform the above described steps in the device of Saeki et al.

Regarding claim 18, Saeki et al discloses reading means (fig. 15) for reading search time information (fig. 9) for stream object units, each stream object unit consisting of a plurality of digital transport stream (fig. 10) and the search time information being the length of each stream object unit expressed in terms of a count value counted at a constant interval (col. 9, line 42 – col. 10, line 52); and that the

information on the start time of each stream object has been recorded for accessing stream objects (col. 18, line 14 – col. 19, line 5). However, Saeki et al does not disclose comparing a requested search time with the start time and controlling the reading means to reproduce according to the detected address.

Moriyama et al teaches a controlling means for detecting a stream object containing a requested search time by comparing the requested search time with the start time of each stream object consisting of one or more stream object units, and moving the data reproducing position of the reading means to access a time information entry corresponding to the read index information (col. 27, line 20 – col. 28, line 42). Since the time map tables of Saeki et al indicate the address of stream objects in relation to time information, controlling the reading means to read the index information pointing to the location on the search time information for the start position of the detected stream object would have to be done.

It would have been highly desirable to have a controlling means so that the time information can be used to perform a time search operation, thereby allowing a user to jump to specific times in the video data.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have a controlling means in the device of Saeki et al.

Regarding claim 20, Saeki et al discloses a pickup (fig. 15) to read recorded stream object units (fig. 7) and search time information for the stream object units (fig. 9), each stream object unit consisting of a plurality of digital transport streams (fig. 10) and the search time information being the length of each stream object unit expressed

in terms of a count value counted at a constant interval (col. 9, line 42 – col. 10, line 52), wherein information on the start time of each stream object has been recorded for accessing stream objects (col. 18, line 14 – col. 19, line 5). However, Saeki et al does not disclose a data analyzer and a controller.

Moriyama et al teaches a data analyzer to detect a stream object read by the pickup containing a requested search time by comparing the requested search time with start time of each stream object consisting of one or more stream object units; and to move the data reproducing position of the pickup to access a time information entry corresponding to the index information read by the pickup (col. 27, line 20 – col. 28, line 42). Since the time map of Saeki et al indicates the positions in relation to time information, a controller would have to control the pickup to read the index information pointing to the location on the search time information read by the pickup for the start position of the stream object detected by the data analyzer.

It would have been highly desirable to have a data analyzer and a controller so that the time search operation could be performed, thereby allowing a user to jump to specific times in the video data.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have a data analyzer and a controller in the device of Saeki et al.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ando et al discloses a DVD player.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Polin Chieu whose telephone number is (703) 308-6070. The examiner can normally be reached on M-Th 8:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew B. Christensen can be reached on (703) 308-9644. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

PC
March 31, 2004